

ABSTRACT OF THE DISCLOSURE

A system and method of estimating the position of a mobile terminal (MT) operating in a radio telecommunications network. Expected Received Signal Strength (RSS) values are predicted by a computer-aided prediction tool, and/or are measured by a test MT from base station transceivers. The predicted and measured RSS values are then tagged to indicate whether each value was predicted or measured. The RSS values are then stored at a plurality of locations in a database. When RSS measurements are received from the MT being located, a covariance matrix is used to compute metrics for the locations in the database. If more than a threshold percentage of the locations were populated with measured values, a Maximum-Likelihood (ML) estimator is used to estimate the position of the MT. If fewer than the threshold percentage of locations were populated with measured values, a Minimum-Mean-Square-Error (MMSE) estimator is used to estimate the position.